

800	<b>CLOSED LOOP SPEED CONTROL SYSTEM FOR DC MOTOR WITH COMMUTATOR</b>	832	..By frequency modification
801	.Field control, or field and armature control, by digital or combined analog and digital circuitry	833	..By voltage or current modification
803	.Field control, or field and armature control, by analog (only) circuitry	834	..By selection of windings
804	..By pulse width or duty cycle modification	835	..By control of motor structure
805	..By phase or frequency modification	836	...Position or number of brushes
806	..By voltage or current modification	837	..By periodic mechanical switch
807	...With variable impedance	838	..With plural selectable speeds (e.g., with manual switch, potentiometer
808	..By selection of windings	839	...By selecting impedance
809	.Armature control by digital or combined analog and digital circuitry	840	....Resistive
811	..By pulse width or duty cycle modification	841	....Inductive
812	..By phase and frequency modification	842	<b>CLOSED LOOP ACCELERATION CONTROL SYSTEM FOR DC MOTOR WITH COMMUTATOR</b>
813	..By phase modification	843	.Field control, or field and armature control
814	..By frequency modification	844	.Armature control
815	..By voltage or current modification	847	..By voltage or current modification
816	.Analog armature control	848	<b>OPEN LOOP ACCELERATION CONTROL SYSTEM FOR DC MOTOR WITH COMMUTATOR</b>
819	..By pulse width or duty cycle modification	849	.Field control, or field and armature control
820	..By phase or frequency modification	850	..By transformer or inductive device
821	..By voltage and current modification	851	..By patterned switch
822	..By voltage modification	852	..By insertion of resistance
823	..By current modification	853	.Armature control
824	..By variable impedance (e.g., potentiometer)	854	..By voltage or current modification
825	<b>OPEN LOOP SPEED CONTROL SYSTEM FOR DC MOTOR WITH COMMUTATOR</b>	855	..By selectable or variable impedance
826	.Field control, or field and armature control	856	...By insertion of resistance or shorting of circuit
827	..With plural selectable speeds (e.g., manual switch)	857	....With relay
828	.Armature control by digital or combined analog and digital circuitry	858	.....Time delay relay
829	..By pulse width or duty cycle modification	859	....With patterned switch
830	.Analog armature control	860	...Manual
831	..By pulse width or duty cycle modification		
			<b><u>CROSS-REFERENCE ART COLLECTIONS</u></b>
		900	<b>SPECIFIC SYSTEM OPERATIONAL FEATURE</b>
		901	.Sample and hold
		902	.Compensation
		903	.Protective (e.g., voltage or current limit)
		904	.Stored velocity profile

905	.Armature and field windings connected in series (i.e., series motor)	936	.Food preparation equipment
		937	.Hand tool

906 .Proportional-integral system

907 **SPECIFIC CONTROL CIRCUIT ELEMENT**

**OR DEVICE**

907.2 .Bridge circuit

907.5 .Computer or microprocessor

908 .Frequency to voltage converter

909 .Monitoring means

910 .Operational/differential  
amplifier

911 .Phase locked loop

912 .Pulse or frequency counter

913 .Saturable reactor, space  
discharge device, or magnetic  
amplifier

914 ..Thyratron or ignitron

915 .Sawtooth or ramp waveform  
generator

916 .Threshold circuit

917 .Thyristor or SCR

918 ..Trigger by unijunction  
transistor

919 ..Triggered by resistor or  
capacitor

920 ..Chopper

921 .Timer or time delay means

922 .Tuned or resonant circuit

923 **SPECIFIC FEEDBACK CONDITION OR  
DEVICE**

924 .Centrifugal device (e.g.,  
governor)

925 ..Including contacts which open  
and close motor circuit

926 ..Which controls a vacuum tube or  
solid-state device in motor  
circuit

927 ..Which varies resistance of  
motor circuit

928 ..Which controls position of  
commutator brushes

928.1 .Counter or back EMF (CEMF)

929 .Fluid/granular material flow  
rate, pressure, or level

930 .Load or torque

931 ..Electric generator or magnet as  
auxiliary load

932 ..With reverse torque (e.g.,  
braking)

933 .Radiant energy responsive device

934 .Thermal condition

935 **SPECIFIC APPLICATION:**

#### FOREIGN ART COLLECTIONS

FOR **CLASS-RELATED FOREIGN DOCUMENTS**